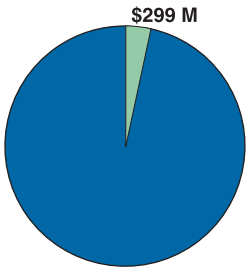
Goal 4 FY 2001 Obligations



Note: EPA FY 2001 Total Obligations were $9,007 million

GOAL 4: PREVENTING POLLUTION AND REDUCING RISK IN COMMUNITIES, HOMES, WORKPLACES, AND ECOSYSTEMS

Pollution prevention and risk management strategies aimed at cost-effectively eliminating, reducing, or minimizing emissions and contamination will result in cleaner and safer environments in which all Americans can reside, work, and enjoy life. EPA will safeguard ecosystems and promote the health of natural communities that are integral to the quality of life in this nation.

PROGRESS TOWARD STRATEGIC GOAL AND OBJECTIVES

EPA made progress in FY 2001 toward attaining its goal to ensure cleaner and safer environments by preventing pollution before it occurs and reducing human and ecosystem risks from pollutants that cannot be eliminated at their source. EPA's work under this goal spans seven strategic objectives: reducing pesticide risks to workers, consumers, and ecosystems; reducing the incidence of childhood lead poisoning; screening new and existing chemicals for potential human and ecological risks; improving indoor air quality to reduce or eliminate indoor environmental pollutants in the home and to reduce asthma incidents; reducing toxic wastes through pollution prevention; increasing municipal recycling and decreasing waste toxicity; and assessing environmental conditions on tribal lands.

EPA is on track to meet most of its strategic objectives under Goal 4. Through numerous projects, the Agency has taken steps to reduce pesticide risks to workers, consumers, and ecosystems. The Agency has supported worker protection by developing training materials; sponsoring radio public service announcements, in Spanish, promoting worker safety; and funding trainers of agricultural workers. The risk to consumers and ecosystems from pesticides has been reduced through clearer and more useful pesticide labels and the Agency's emphasis on the importance of reading the product label before use. The Agency is also ensuring that pesticides pose less risk to groundwater by carefully managing pesticides that have high leaching and persistence potential. EPA is now managing 19 out of 31 such pesticides to protect groundwater.

EPA has had great success in reducing children's exposure to lead. The number of young children with high levels of lead in their blood has been drastically reduced since the early 1990s, prompting the Agency to set an aggressive new goal in its revised Strategic Plan to reduce the incidence of childhood lead poisoning from 900,000 cases in the early 1990s to 200,000 by 2007.

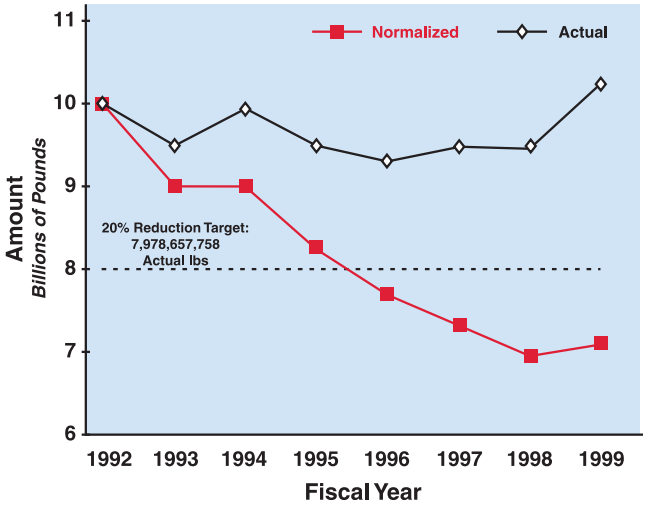
EPA has helped ensure the safety of chemicals, making progress toward its strategic objective, by securing voluntary commitments from more than 450 companies to provide essential risk screening data for more than 2,100 chemicals currently in use and being produced in quantities exceeding 1 million pounds per year. The Agency also initiated a collaborative program with industry and national experts to assess the risks of a key set of chemicals to which children are disproportionately exposed.

EPA has experienced a significant setback in its work toward its strategic objective to cut nonrecycled waste generation by 20 percent from 1992 levels by 2005 through source reduction and other measures. The Agency uses data provided by industry to the Toxics Release Inventory (TRI) to measure progress toward this objective, targeting annual reductions of 2 percent (**http://www.epa.gov/tri/**). According to the most recent TRI data (covering 1999), there has been a 684 million pound (7.2 percent) increase in the generation of nonrecycled wastes (TRI pollutants) from 1998 amounts. EPA will not have

FY 2001 data until spring 2003 because of reporting and data processing schedules.

The Agency attributes much of this increase to the surge in production that occurred throughout the American economy in the late 1990s. When the TRI data are normalized to control for changes in production, the increase from 1998 to 1999 becomes much smaller (191 million pounds or 2.7 percent).

Non-Recycled Waste Trend: FY 1992–1999



Nonetheless nonrecycled wastes increased causing the Agency to fail to achieve one of its most prominent annual performance goals and placing achievement of the strategic objective at risk. The Agency's revised Strategic Plan contains an additional target calling for a production-adjusted (normalized) reduction of 30 percent from 1998 amounts. Controlling for production change will increase the visibility of the results being achieved through source reduction, providing a greater incentive for companies and governments to expand their efforts toward this goal.

FY 2001 PERFORMANCE

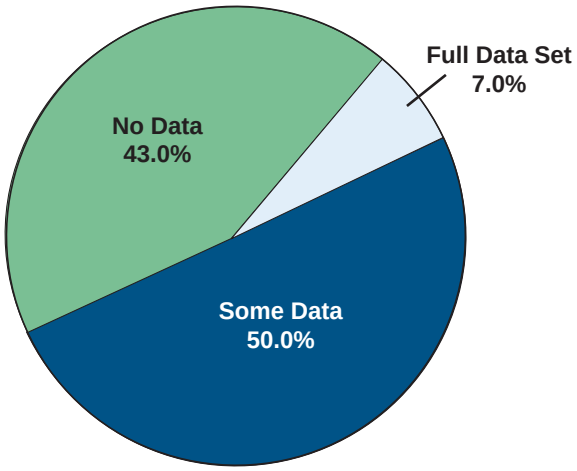
Risk Identification

Risk identification is the initial stage along a continuum of risk reduction activities. In FY 2001 EPA exceeded its expectations by securing voluntary commitments from hundreds of companies to provide essential risk screening data for more than 2,100 industrial and commercial chemicals, each produced in quantities exceeding 1 million pounds every year. Companies that manufacture or import High Production Volume (HPV) chemicals—those produced in amounts exceeding 1 million pounds per year—were invited to sponsor chemicals by voluntarily pledging to make basic hazard information publicly available by 2005 as part of the HPV Challenge Program. Company responses exceeded the Agency's and stakeholders' expectations: 469 companies have sponsored 2,155 chemicals. Information on 181 chemicals has already been submitted and is now available on the Chemical Right-to-Know web site, **http://www.epa.gov/oppt/chemrtk/**.

In June 2001 EPA launched the Voluntary Children's Chemical Evaluation with commitments by 34 companies to assess fully the risks of 20 chemicals to which children might be disproportionately exposed. EPA, other federal agencies, states, communities, industry, nongovernmental organizations, and other nations will use the data developed through both of these programs in assessing and reducing the risks of chemicals and chemical management practices. Almost every risk assessment performed in recent years has relied on the EPA data sources that will be vastly expanded through these efforts.

The Agency has also worked to identify risks posed by endocrine disruptors—chemicals that may cause deformities and other health problems in wildlife and possibly humans. In FY 2001 EPA completed the architecture of the Endocrine Disruptor Priority Setting Data Base, which will help to set priorities for screening from the current

Current Hazard Data Availability for U.S. High Production Volume Chemicals



Key risk data are missing for most chemicals in commerce.

inventory of 87,000 pesticides, commercial chemicals, cosmetic ingredients, food additives, and nutritional supplements. The Agency will be able to use these screens to identify likely endocrine disruptors, thereby allowing the endocrine-disrupting properties of these chemicals to be verified. To ensure that EPA is using the best science in this effort, the Agency established the Endocrine Disruptor Methods Validation Subcommittee to provide a forum for the validation and external scientific peer review of endocrine disruptor screening and testing methods.

To identify risks on tribal lands, in FY 2001 EPA completed the structure of the Agency's Tribal Information Management System, a continuously updated database and geographic information system that will provide profiles and environmental assessments for all Indian tribes in the United States by FY 2005. This system will draw together environmental information on tribes from existing EPA databases. When complete, this tool will enable tribes and users to assess environmental conditions in Indian Country nationally, as well as individually by tribe.

Risk Reduction and Elimination

Once risks are identified, EPA pursues two strategies for reducing or eliminating them. The Agency's first choice is to prevent risks by eliminating pollution at the source. One example of the Agency's pollution prevention efforts in FY 2001 was the use of EPA's Pollution Prevention Assessment Framework tools to train PPG Industries and Eastman Kodak to identify product alternatives that are sustainable both economically and environmentally. Through these tools, industries can identify safer products and processes early in the research and development stage, thus reducing product development costs and increasing pollution prevention benefits. Companies that use these tools are eligible for expedited reviews of their new chemical review applications, providing them critical and valuable competitive advantages in bringing new, greener products to market. As a result of these upfront reviews, fewer harmful chemicals are used in industrial processes, so smaller amounts of such chemicals have the potential to be released into the environment.

When pollution cannot be eliminated at the source, EPA uses several risk reduction strategies: education and outreach, partnership and collaboration, regulation, and international negotiation. In FY 2001 the Agency continued to make strides in its campaign to reduce asthma in children by providing tools for schools to use to improve air quality. EPA launched an extensive asthma public service campaign to raise the public's awareness of the role that indoor environmental triggers play in the severity and frequency of children's asthma. Also, the Radon Program's long-running public awareness campaign continued with an Emmy Award-winning public service announcement providing facts about radon that are not commonly known by the public. The Agency estimates that the radon program will yield an estimated 2,500 lives saved from exposure reductions achieved from 1986 through 2000; of these, an estimated 350 lives will be saved from exposures averted in 2000 alone, based on information from the National Association of Home Builders' survey and the three largest radon fan manufacturers in the United States. Statistics for FY 2001 are not yet available (**http://www.epa.gov/iaq/radon**).

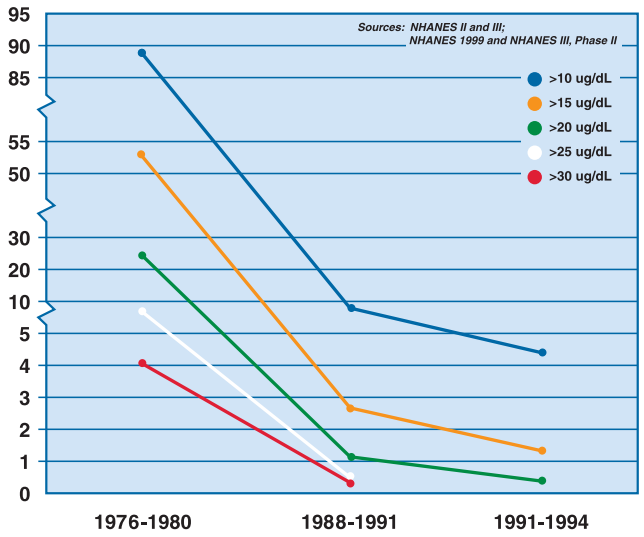
INDOOR AIR QUALITY TOOLS FOR SCHOOLS

EPA was successful in recruiting schools to adopt sound "Indoor Air Quality Tools" practices. This partnership with the American Lung Association implements school-based asthma management education through the program "Open Airways for Schools." In EPA's New York City regional office, years of work by the Regional Indoor Environments staff with the New York City Schools culminated in passage of a resolution by the Chancellor and Board of Education committing all New York City public schools to adopt "Tools for Schools" by the 2005–2006 school year. New York City alone has 1,200 schools and approximately 1.1 million schoolchildren (**http://www.epa.gov/iaq/schools**).

EPA achieved a major milestone in its campaign to reduce the incidence of childhood lead poisoning by finalizing a rule that defines the locations and conditions of lead-based paint and specific levels of lead in dust and soil that should be classified as "lead-based paint hazards." The rule, the result of 5 years of work in the Agency, will help inspectors and

risk assessors assist property owners in deciding how to address lead problems in homes through actions that may include lead-based paint abatement, covering or removing soil, or professional cleaning of lead dust. This rule will significantly reduce the risk that lead poses to human health, particularly that of children. About 27 million homes are projected to exceed 1 or more of the hazard levels, and the Agency estimates that approximately 46 million children will experience reduced exposure to household lead in paint, dust, and soil over the next 50 years, to the extent that response actions are taken in homes that exceed the hazard levels. With the assistance of states and tribes, EPA has trained and certified thousands of professionals in state-of-the-art lead paint abatement practices to address household sources of lead.

Blood Lead Levels of Children Aged 1–5 Years, 1976–1994



EPA also reduced risks from pesticides to workers and the environment through the Strategic Agricultural Initiative program, expanding the use of safer pesticides and farming techniques in FY 2001. The Initiative, along with Agency partners in government and industry, is responsible in part for the significant increase in the use of safer pesticides, well beyond EPA's original targets. Pesticides considered by the Agency to be "safer" (those registered through the Reduced Risk Initiative and biopesticides) constituted an estimated 3.6 percent of all agricultural pesticide acre-treatments in 1998, increasing to 7.1 percent in 2000. (Refer to Goal 3 for additional data on safer pesticide acre-treatments in recent years.)

EPA reduced risks pesticides pose to children through reexamination of insecticide product packaging. In FY 2001 the Agency undertook a systematic review of residentially used pesticide products to determine whether these products meet today's Child-Resistant Packaging requirements. The Agency identified more than 160 residential pesticide products that require further action. This ongoing effort is making pesticide registrants more aware of their responsibility to protect children.

Protection of agricultural workers has been significantly enhanced through the reregistration of pesticides. Older pesticides are required to be reregistered to ensure that they meet today's safety standards. Reregistration decisions in FY 2001 improved worker protection through carefully crafted restrictions on use. For example, to mitigate risks to workers who reenter treated crop areas, the Agency is modifying restricted entry intervals for most crops.

EPA addresses chemicals that persist, accumulate through the food chain, and are toxic to humans or environmental receptors (called persistent bioaccumulative toxics, or PBTs) through reduction and elimination efforts. In FY 2001 the Agency increased to 25 the number of PBT reduction/elimination projects that have been initiated since FY 2000 with EPA's financial support. The Agency also entered into partnerships with the American Hospital Association, the American Nurses Association, and Health Care Without Harm in a nationwide campaign to reduce the use of mercury in more than 300 hospitals. Mercury is a PBT that affects the nervous system, and methyl mercury is a chemical species that bioaccumulates in fish. Fish consumption advisories are in effect for mercury in thousands of lakes and rivers, including much of the Great Lakes ecosystem. Harmful effects from mercury include cancer (possible); temporary or permanent damage to the stomach, large intestine, brain, lung, and kidneys; permanent harm to unborn children; and increased blood pressure and heart rate.

Once wastes are produced, it is often possible to recycle them. Recycled materials are diverted from landfills and come back through the economy as useful products. In FY 2001 EPA made significant progress creating new, voluntary partnerships of industry with government to recycle problem waste streams, in particular electronic products and carpets.

These waste streams are of growing concern to local governments because of increasing quantities, difficulties in handling, and toxicity (especially for electronics). Negotiations are under way to establish voluntary national mechanisms that divert electronics and carpets from disposal. Data reported in FY 2001 reflect that the 1999 National Municipal Solid Waste recycling rate increased to 27.8 percent, 2 million tons more than in 1998.

Research Contributions

FY 2001 research under Goal 4 focused on developing exposure data, risk assessment methodologies, and technologies to improve understanding of health risks and reduce community exposures to environmental stressors. EPA researchers instructed industry and other federal agencies on the use of Structure-Activity Relationship (SAR) computer technologies for toxicity prediction and modeling and carcinogenicity prediction. This technology associates chemical structure with toxicity, and from the structure and toxicity of one chemical it can predict the toxicity of other chemicals that have similar structural attributes. By implementing SAR in industry and other federal agencies, collection of toxicity data will be more complete and consistent and duplication of research efforts will be reduced. In the long run SAR technology will identify chemicals that need additional risk minimization controls when used in industry and will eliminate potentially toxic chemicals from widespread industrial use, thus preventing and reducing risk to the environment and human health.

Program Evaluation

In February 2001 the General Accounting Office released a report entitled *Environmental Protection: EPA Should Strengthen Its Efforts to Measure and Encourage Pollution Prevention*. The audit reviewed not only the extent to which companies are employing pollution prevention (P2) strategies but also the major incentives and disincentives that affect use of those strategies. The evaluation found limitations in the adequacy of available TRI data to determine the extent to which companies are adopting P2 strategies. Public availability of the TRI data and the opportunity for financial return, however, are the major incentives for businesses to employ P2 strategies; technical challenges and high costs are disincentives.

In FY 2001 the Certification and Training Assessment Group (CTAG), a consortium of EPA, U.S. Department of Agriculture, state, and Cooperative Extension Service representatives, continued efforts to implement improvements in and provide future direction for the pesticide applicator training and certification program. Also, the assessment of the related Worker Protection Standard, which protects agricultural workers from the risk of pesticides, continued in FY 2001. Two pilot projects on hazard communication and improved worker training were established. Recommendations on program improvements in the areas of training, communications, enforcement, and integration with the certification and training program are expected early in FY 2003.

STATE AND TRIBAL CONTRIBUTIONS

State Contributions

Unlike EPA's air and water protection work under Goals 1 and 2, very few of the environmental programs under Goal 4 are delegated to states and tribes for implementation and enforcement. A key exception is states' significant contribution to achieving EPA's goal to reduce lead poisoning in children. In FY 2001, 36 states administered their own programs to train and certify lead-based paint abatement professionals, contributing at least half of the workers to the nationwide pool available to homeowners seeking to safely renovate their homes and offices.

In FY 2001 numerous states joined EPA in commissioning a first-time study of the national economic impact of the recycling and reuse industry. Achievement of the Agency's national target of a 35 percent recycling rate by 2005 depends in large part on federal and state government support for markets for recyclables and encouragement of consumers to seek out and buy recycled products. The *U.S. Recycling Economic Information Study* documented that the recycling and reuse industries support more than 56,000 recycling establishments, annually grossing over $236 billion in revenues and employing more than 1.1 million people with an payroll of $37 billion. Recycling and reuse industries use market-based incentives to increase recycling rates, reducing material flows to limited-capacity landfills and

preventing dangerous chemicals contained in these materials from entering the environment.

States play a major role in pollution prevention efforts, supported by EPA grant funds. For example, Environmental Management System workshops were conducted for metal finishers in northern California, resulting in a 95 percent reduction in water usage, a 50 percent reduction in hazardous waste generation, and 15 percent reduction in electricity usage.

Tribal Contributions

In FY 2001 tribes made a number of contributions to achieving objectives under EPA's pollution prevention goal. Recycling increased among the St. Croix and Huron Tribes in the Great Lakes Region, resulting in 22.7 tons of diverted waste. Food waste composting increased among the Fond du Lac and Oneida Tribes, resulting in 3.8 tons of food waste composted and related waste disposal cost savings. The Indian Health Service conducted in-home environmental management assessments and provided educational seminars to families with children who have a high incidence of asthma or respiratory illness. The Agency in partnership with the U.S. Department of Health and Human Services and the Inter-Tribal Council of Arizona offered on-site education and training to health practitioners and tribal leaders to develop asthma risk reduction programs, prepare culturally sensitive guidance materials and training courses to address indoor environment health risks to American Indians, and promote the Smoke-Free Home Pledge campaign on designated tribal reservations and territories. Two tribes began to train and certify lead paint abatement professionals.

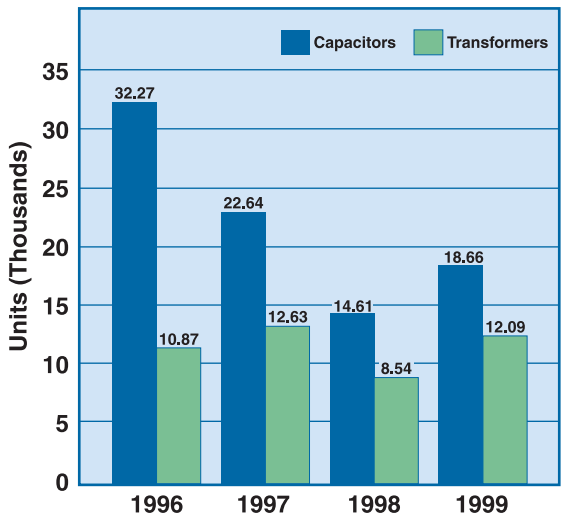
In FY 2001 EPA completed the framework for the Tribal Baseline Assessment Project and published environmental profiles for 200 tribes. The Baseline Assessment project, in one of its first national-level assessments, discovered that species that are rare or particularly sensitive to pollution from human activities are statistically more abundant in Indian Country than in the Nation as a whole, underscoring the need for environmental protection activities by EPA and other agencies because tribal lands in general bear a disproportionate amount of pollution.

EPA's Indian Environmental General Assistance Program (GAP) represents the largest single source of Agency funding for tribal environmental programs. GAP has increased from the original $8.5 million in 1994 to more than $52 million for FY 2001. GAP funds are helping more than 400 tribes and inter-tribal consortia (of the 572 that are eligible) build environmental programs in Indian Country.

ASSESSMENT OF IMPACTS OF FY 2001 PERFORMANCE ON FY 2002 ANNUAL PERFORMANCE PLAN

Because of the time lag in obtaining results data, EPA is now able to report past year results for some programs. In some cases this lag has required the Agency to revisit planning targets based on faulty assumptions. For example, EPA set aggressive goals for retiring and safely disposing of the national stockpiles of millions of pieces of electronic equipment containing polychlorinated biphenyls (PCBs), establishing annual targets in FY 2001 for 20,000 transformers and 35,000 capacitors. In May 2001, however, EPA obtained the first national data compiled from states, showing that the actual numbers of units retired in past years were only 12,000 and 19,000, respectively. Accordingly the Agency has revised its FY 2002 performance measures to reflect substantially lower expectations and is assessing the need to develop new strategies for achieving its long-term strategic targets (120,000 and 210,000 units by 2007).

PCB Units Disposed Of, Year End



PERFORMANCE DATA CHART

The following performance data chart includes performance results for the FY 2001 APGs that support Goal 4. The performance chart reflects the Agency's 1997 Strategic Plan goals and objectives with which FY 2001 APGs are associated. Relevant FY 2000 and FY 1999 APGs are included for ease in comparing performance. Data quality information for Goal 4 can be found on pages B-15 to B-17 of Appendix B, "Data Quality." Additionally, the chart provides results for FY 2000 and FY 1999 APGs for which data were not available when the FY 2000 report was published, as well as for FY 2000 APGs that are not associated with FY 2001 APGs.

Summary of FY 2001 Performance

5 Goal Met	0 Goal Not Met	2 Data Lag

Goal 4: Preventing Pollution and Reducing Risks

Annual Performance Goals and Measures
FY 1999–FY 2001 Results

By 2005, Public and Ecosystem Risk From Pesticides Will Be Reduced Through Migration to Lower Risk Pesticides and Pest Management Practices, Improving Education of The Public and At-risk Workers, and Forming "Pesticide Environmental Stewardship" Partnerships With Pesticide User Groups.

Progress Toward Strategic Objective: Through a wide array of environmental programs, EPA has made significant progress toward fulfilling and meeting the target for this objective. EPA's Strategic Agricultural Initiative, in which states, academia, and grower groups develop and implement model agricultural partnership pilot projects, is providing a highly visible platform for environmentally friendly agricultural projects. (Twelve projects were initiated in FY 2001.) In addition, the Pesticide Environmental Stewardship Program has approved 109 strategies developed by voluntary partners in both agricultural and nonagricultural settings. EPA also is ensuring that pesticides pose less risk to the Nation's groundwater through careful management of pesticides with high leaching and persistence potential. (Nineteen pesticides have been managed to protect groundwater.) EPA can already see the benefit of work it is doing to reduce the risk of pesticides to human health and the environment: pesticides that the Agency considers "safer" (those registered through the Reduced Risk Initiative and biopesticides) constituted an estimated 3.6% of all agricultural pesticide acre-treatments in 1998 and increased to 7.1% in 2000, significantly exceeding the Agency's original target.

By 2005, the Number of Young Children With High Levels of Lead in Their Blood Will Be Significantly Reduced From the Early 1990's.

Progress Toward Strategic Objective: Lead exposure adversely affects the cognitive development and behavior of young children. The number of children with elevated blood lead levels (> 10 µg/dL) decreased 80% from the late 1970s through the early 1990s. The 1994 reporting of the Centers for Disease Control and Prevention's National Health and Nutrition Examination Survey results estimated more than 900,000 affected children. More recent data on the number of children with elevated blood lead levels are not yet available, but EPA believes based on partial results that the number dropped significantly through the 1990s and that this goal will be achieved, prompting the Agency to set an aggressive new goal in its revised Strategic Plan: lowering childhood lead poisoning incidence by 2007 to fewer than 200,000 children between the ages of 1 and 5. In FY 2001 EPA completed a keystone of the national lead poisoning reduction regulatory infrastructure, the Lead Hazard Identification Rule.

By 2005, of the Approximately 2,000 Chemicals and 40 Genetically Engineered Microorganisms Expected to Enter Commerce Each Year, EPA Will Significantly Increase the Introduction by Industry of Safer or "Greener" Chemicals Which Will Decrease the Need for Regulatory Management by EPA.

Progress Toward Strategic Objective: EPA continued to fulfill its statutory responsibility to safeguard the entry of new chemicals into commerce by screening nearly 1,800 Premanufacture Notices, leading to the introduction into commerce of more than 600 safer or "greener" chemicals. To ensure the safety of chemicals already in use, EPA secured commitments from 469 companies to voluntarily provide critical hazard screening information under the Chemical Right-to-Know Act. These companies will provide information on more than 2,100 chemicals produced in quantities of at least 1 million pounds per year. On separate fronts, the Agency initiated a program to assess risks of chemicals to which children might be disproportionately exposed and completed key components of its multiyear effort to identify chemicals that pose threats to human and ecological endocrine systems, leading EPA to believe it is fully on track to meet this goal.

APG 19		Planned	Actual
FY 2001	**EPA is required to review all chemicals and microorganisms before they are manufactured commercially to determine whether they can be handled and used safely. If EPA determines that an unreasonable risk might be posed to people or the environment, it can block the chemical's entry into commerce or establish control measures to ensure the chemical's safety in the marketplace. The New Chemicals Program serves as a gatekeeper that can identify those restrictions, up to and including a ban on production, based on review of industry-provided Premanufacture Notices. EPA reviewed all 1,770 Premanufacture Notices received during FY 2001. The target of 1,800 is based on the average of previous year**	1,800	1,770

	submissions by industry. At the end of 2001, 21% of all chemicals in commerce had been assessed for risks. Goal Met.	
FY 2000	*Ensure that of the up to 1,800 new chemicals and microorganisms submitted by industry each year, those that are introduced in commerce are safe to humans and the environment for their intended uses. Goal Met.*	*1,838*
FY 1999	*Ensure that of the approximately 1,800 new chemicals and microorganisms submitted by industry each year, those that are introduced in commerce are safe to humans and the environment for their intended uses. Goal Met.*	*1,717*

FY 2001 Result: EPA is required to review all chemicals and microorganisms before they are manufactured commercially to determine whether they can be handled and used safely. If EPA determines that an unreasonable risk might be posed to people or the environment, it can block the chemical's entry into commerce or establish control measures to ensure the chemical's safety in the marketplace. The New Chemicals Program serves as a gatekeeper that can identify those restrictions, up to and including a ban on production, based on review of industry-provided Premanufacture Notices. EPA reviewed all 1,770 Premanufacture Notices received during FY 2001. The target of 1,800 is based on the average of previous year submissions by industry. At the end of 2001, 21% of all chemicals in commerce had been assessed for risks.

APG 20		**Planned**	**Actual**
FY 2001	**EPA will make publicly available data from test plans submitted by industry or chemicals already in commerce. Goal Met.**		
	Performance Measures		
	- Through chemical testing program, obtain test data for high production volume chemicals on master testing list.	**800 chemicals**	**724 chemicals**

FY 2001 Result: Companies that manufacture or import HPV chemicals were invited to participate in voluntarily sponsoring chemicals, pledging to make basic hazard information publicly available by 2005. More than 460 companies have volunteered to provide EPA with test data for 2,155 chemicals and 187 chemical categories of the 2,800 HPV chemicals. Test plans and robust summaries of existing data were submitted by industry for over 700 chemicals in 2001. For each test plan that was submitted, EPA made the data publicly available on the Internet at http://www.epa.gov/oppt/chemrtk/.

By 2005, 15 Million More Americans Will Live or Work in Homes, Schools, or Office Buildings With Healthier Indoor Air Than in 1994.

Progress Toward Strategic Objective: As of FY 2001 a cumulative total of 8.8 million (estimated) Americans were experiencing healthier indoor air, or 55% of the goal had been attained. With so much progress already accomplished, EPA is confident of meeting this goal.

APG 21		**Planned**	**Actual**
FY 2001	**890,000 additional people will be living in healthier residential indoor environments. Goal Met.**	**890,000**	**890,000**
FY 2000	*890,000 additional people will be living in healthier residential indoor environments. Goal Met.*		*1,032,000*
FY 1999	*700,000 additional people will live in healthier residential indoor environments. Goal Met.*		*1,322,000*

FY 2001 Result: Americans spend about 90% of their time indoors, where they are exposed to levels of pollutants that are often higher than those outdoors. As a result, indoor air pollution poses high risks to human health, especially to sensitive populations, and has been ranked among the top four environmental risks in relative risk reports prepared by EPA, the Science Advisory Board, and several states. As a result of EPA's efforts to improve radon-resistant features in homes, decrease the number of children exposed to environmental tobacco smoke, increase the number of people living in radon-mitigated homes, and educate people with asthma about indoor air asthma triggers, an additional 890,000 people are living in healthier residential indoor environments.

APG 22		**Planned**	**Actual**
FY 2001	**1,930,000 students, faculty and staff will experience improved indoor air quality in their schools. Goal Met.**	**1,930,000**	**1,930,000**
FY 2000	*2,580,000 students, faculty and staff will experience improved indoor air quality in their schools. Goal Met.*		*2,600,000*

FY 2001 Result: Studies show that half of our Nation's 110,000 schools have problems linked to indoor air. To improve air quality in schools, EPA implements the "Indoor Air Quality Tools for Schools" program to provide low-cost/no-cost guidelines for proper operation

and maintenance of school facilities that will result in a healthier indoor environment for students and staff. As a result of this program in FY 2001, an additional 1.93 million students, faculty, and staff are experiencing improved indoor air quality in their schools. The Nation has approximately 110,000 schools with an average of 525 students, faculty, and staff occupying them, for a total population of 58 million. See http://www.epa.gov/iaq/schools/ for more information.

By 2005, Reduce by 25% (From 1992 Level) the Quantity of Toxic Pollutants Released, Disposed of, Treated, or Combusted for Energy Recovery. Half of This Reduction Will Be Achieved Through Pollution Prevention Practices.

Progress Toward Strategic Objective: The aggregate change in nonrecycled wastes since 1992 is an increase of 243 million pounds (2.4%), though when the analysis is normalized to account for changes in production and reporting requirements, the result is a reduction of 2.794 billion pounds (-28.0%) as of the most recent TRI report (1999). Because the original goal targets include only the actual reductions (as opposed to the normalized reductions), the Agency is concerned that it might not achieve this goal and is proposing new strategies and initiatives to reverse the recent increases in this measure. In addition, because wastes have increased, EPA cannot assess the extent to which waste reductions are resulting from pollution prevention practices. The Agency will begin analyzing the normalized data, which do show significant waste reductions, in FY 2002 under its revised Strategic Plan, which expands this goal to include a normalized reduction goal.

APG 23		Planned	Actual
FY 2001	**The quantity of Toxic Release Inventory (TRI) pollutants released, disposed of, treated or combusted for energy recovery in 2001 (normalized for changes in industrial production) will be reduced by 200 millions pounds, or 2%, from 2000. Data Lag.**	**- 200 M**	**data available in FY 2003**
FY 2000	*The quantity of TRI pollutants released, disposed of, treated or combusted for energy recovery, (normalized for changes in industrial production) will be reduced by 200 millions pounds, or 2%, from 1999 reporting levels. Data Lag.*		*data available in FY 2002*
FY 1999	*The quantity of TRI pollutants released, treated, or combusted for energy recovery will be reduced by 200 million pounds, or 2% from 1998 reporting levels. Goal Not Met.*	*- 200 M*	*+ 684 M*

FY 2001 Result: Data for this APG will be available in spring 2003.

FY 1999 Result Available in FY 2001: The TRI tracks the release of toxic chemicals by facilities that manufacture, process, or otherwise use toxic materials. EPA uses the TRI to measure reduction of nonrecycled waste generated by those manufacturing facilities. Pollution prevention strategies focus on avoiding creation of wastes by redesigning products, changing processes, substituting raw materials for less toxic substances, and other techniques. Total releases of toxic chemicals decreased by 15.1 million pounds from 1997 through 1998, but the 1999 TRI data reflect an increase in production-related wastes concurrent with a surge in production throughout the American economy. This increase also was accompanied by a continued increase in the use of pollution prevention practices by industry. The 1999 data show a 684-million-pound, or 7.2%, increase in the generation of nonrecycled wastes over 1998 levels. When the TRI data are normalized to control for changes in the level of industrial production from 1998 to 1999, the increase in nonrecycled waste is calculated at 191 million pounds, or 2.7%. EPA is responding to this setback in several ways. In its revised Strategic Plan, which took effect in FY 2002, a second target is added to the strategic objective, calling for a production-adjusted (normalized) reduction of 30% from 1998 levels. Controlling for production change will increase the visibility of the very real results that are being achieved through source reduction, providing a greater incentive for companies and governments to expand their efforts toward this goal. The TRI can be accessed at http://www.epa.gov/tri/.

By 2005, EPA and Its Partners Will Increase Recycling and Decrease the Quantity and Toxicity of Waste Generated.

Progress Toward Strategic Objective: The Agency made significant progress in creating new, voluntary industry-government alliances to recycle problem waste streams, in particular electronic products and carpets. Efforts will continue in this area as EPA works with stakeholders to establish voluntary national mechanisms to divert electronics and carpets from disposal. The Nation also continued to make progress toward the annual targets to increase the rate of recycling of municipal solid wastes, as identified below. Accordingly, EPA believes it is on track to meet this goal.

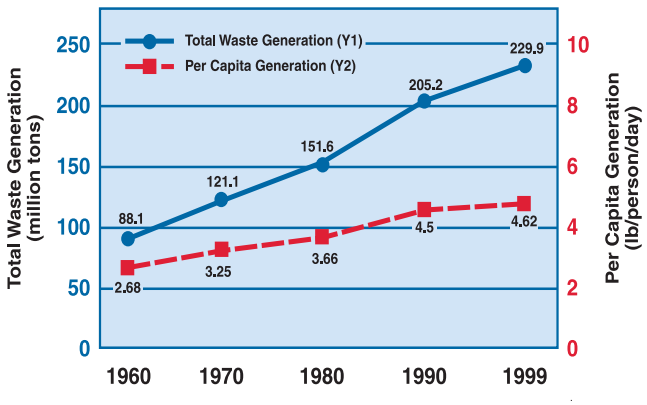
APG 24		Planned	Actual
FY 2001	**Divert an additional 1% (for a cumulative total of 30% or 67 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of Resource Conservation and Recovery Act (RCRA) municipal solid waste at 4.3 pounds per day. Data Lag.**	**67 (30%) 4.3 lb**	**data available in 2003**
FY 2000	*Divert an additional 1% (for a cumulative total of 29% or 64 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.3 pounds per day. Data Lag.*		*data available in 2002*

FY 1999	*Maintain levels (for a cumulative total of 28% or 62 million tons) of municipal solid waste diverted from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.3 pounds per day. Goal Met.*	*62 M* *4.3 lb*	*64 M* *4.6 lb*

FY 2001 Result: Data for this APG will be available in September 2003.

FY 1999 Result Available in FY 2001: Municipal Solid Waste (MSW)—more commonly known as trash or garbage—consists of everyday items such as product packaging, grass clippings, furniture, clothing, bottles, food scraps, newspapers, appliances, paint, and batteries. In 1999, U.S. residents, businesses, and institutions produced more than 230 million tons of MSW, which is approximately 4.6 pounds of waste per person per day, greater than the 1999 target of 4.3 pounds per person per day. When originally established, this target was to be based on the 1990 daily per capita generation rate which EPA then estimated as 4.3 pounds. Subsequent analysis showed the actual 1990 daily per capita MSW generation rate to be 4.5 pounds. At the level of 4.6 in 1999, EPA is closely approaching the goal of maintaining the 1990 level of per capita generation of RCRA MSW. Several MSW management practices, such as source reduction, recycling, and composting, prevent or divert materials from the wastestream. Currently, in the United States, 28% of MSW is recovered and recycled (including composting), 15% is burned at combustion facilities, and the remaining 57% is disposed of in landfills.

Waste Generation Rates From 1960 to 1999



By 2003, 60% of Indian Country Will Be Assessed for Its Environmental Condition, and Tribes and EPA Will Be Implementing Plans to Address Priority Issues.

Progress Toward Strategic Objective: It is anticipated that environmental profiles for approximately 286 tribes will be completed by the end of FY 2002. In constructing its profiles, the Agency's American Indian Environmental Office will make appropriate use of existing EPA databases and will strive to avoid duplication of efforts. By 2005 EPA will assist all federally recognized tribes in assessing the condition of their environment, help in building the tribes' capacity to implement environmental management programs, and ensure that EPA is implementing programs in Indian Country where needed to address environmental issues. Accordingly, the Agency believes it is on track to meet this goal.

APG 25		**Planned**	**Actual**
FY 2001	**Baseline environmental information will be collected by 34% of Tribes (covering 50% of Indian Country). Goal Met.**		
	Performance Measures		
	- Environmental assessments for Tribes (cumulative).	**193 tribes**	**207 tribes**
FY 2000	*16% of tribal environmental baseline information will be collected and 12 additional tribes (cumulative total of 57) will have tribal/EPA environmental agreements or identified environmental priorities. Goal Not Met.*		*16%* *4*
FY 1999	*10% of tribal environmental baseline information will be collected and ten additional tribes (cumulative total of 45) will have tribal/EPA environmental agreements or identified environmental priorities. Goal Met.*		*10%* *11*

FY 2001 Result: Under federal environmental statutes, EPA is responsible for ensuring human health and environmental protection in Indian Country. A lack of comprehensive environmental data severely affects EPA's ability to properly identify risks to human health and the environment in Indian Country. Progress toward building tribal and EPA infrastructure and completing a documented baseline assessment of environmental conditions continues to be a major focus for EPA and tribes. At the end of FY 2001, a cumulative total of 207 tribes had collected baseline environmental information. Environmental assessments of lands will be conducted for 580 tribal entities.

Prior Year Annual Performance Goals Without Corresponding FY 2001 Goals

(Actual Performance Data Available in FY 2000 and Beyond or With Performance Targets Beyond FY 2001)

APG		**Planned**	**Actual**
FY 2000	*Administer federal programs and oversee state implementation of programs for lead-based paint abatement certification and training in 50 states, to reduce exposure to lead-based paint and ensure significant decreases in children's blood levels by 2005.*		*target year is FY 2005*

FY 1999	*Complete the building of a lead-based paint abatement certification and training in 50 states, to ensure significant decreases in children's blood lead levels by 2005 through reduced exposure to lead-based paint.*	*target year is FY 2005*

FY 2000 Annual Performance Goals (No Longer Reported for FY 2001)

Protect homes, communities, and workplaces from harmful exposure to pesticides and related pollutants through improved cultural practices and enhanced public education, resulting in a reduction (to be determined) in the incidence of pesticide poisonings reported nationwide.

Provide methods and models to evaluate the impact of environmental stressors on human health and ecological endpoints for use in guidelines, assessments, and strategies.

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